

Title (en)

LIGHT SOURCE MODULE AND PROJECTION DEVICE

Title (de)

LICHTQUELLENMODUL UND PROJEKTIONSVORRICHTUNG

Title (fr)

MODULE DE SOURCE DE LUMIÈRE ET DISPOSITIF DE PROJECTION

Publication

EP 3147701 B1 20240207 (EN)

Application

EP 15795916 A 20150506

Priority

- CN 201420256311 U 20140519
- CN 2015078354 W 20150506

Abstract (en)

[origin: EP3147701A1] A light source module is provided. The light source module comprises a light source array (71) and a lens array (72) arranged corresponding to the light source array (71). The light source module further comprises a condensing lens (73) covering partial regions of the light source array (71) and the lens array (72), and a reflecting mirror array (74) positioned between the condensing lens (73) and the lens array (72). The reflecting mirror array (74) comprises a plurality of reflecting mirrors, or a plurality of reflecting mirrors and polarizing filters (740). A light path of light beam emitted by each light source of the light source array (71) which is not covered by the condensing lens (73) is provided with at least two reflecting mirrors, or at least one reflecting mirror and one polarizing filter (740). The last reflecting mirror or the polarizing filter in each light path is positioned in the area covered by the condensing lens (73), and accordingly a light beam which can not be directly incident to the condensing lens (73) is transmitted to the condensing lens (73). Since the condensing lens (73) does not need to cover the whole area of the light source array (71), the size of the condensing lens (73) is relatively small, which better satisfies the demands of practical application, and better facilitates the application of the projection device.

IPC 8 full level

G02B 27/14 (2006.01); **G02B 27/10** (2006.01); **G03B 21/20** (2006.01)

CPC (source: EP KR US)

F21V 5/007 (2013.01 - EP US); **F21V 7/0083** (2013.01 - US); **F21V 9/14** (2013.01 - US); **F21V 13/14** (2013.01 - US);
G02B 19/0047 (2013.01 - KR); **G02B 27/106** (2013.01 - EP US); **G02B 27/14** (2013.01 - KR US); **G02B 27/143** (2013.01 - EP US);
G03B 21/20 (2013.01 - EP KR US); **G03B 21/2006** (2013.01 - KR); **G03B 21/2066** (2013.01 - US); **G03B 21/2073** (2013.01 - US);
G03B 21/208 (2013.01 - US); **F21Y 2105/10** (2016.08 - US)

Citation (examination)

CN 203069883 U 20130717 - JILIN YONGLI LASER TECHNOLOGY CO LTD

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 3147701 A1 20170329; EP 3147701 A4 20180103; EP 3147701 B1 20240207; CN 203930191 U 20141105; JP 2017516151 A 20170615;
JP 6389902 B2 20180912; KR 101909588 B1 20181018; KR 20170007805 A 20170120; US 10830409 B2 20201110;
US 2017097562 A1 20170406; WO 2015176608 A1 20151126

DOCDB simple family (application)

EP 15795916 A 20150506; CN 201420256311 U 20140519; CN 2015078354 W 20150506; JP 2016567773 A 20150506;
KR 20167035273 A 20150506; US 201515312050 A 20150506